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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------------|----------------------|---------------------|------------------|
| 09/625,792 | 07/26/2000 | Hartmut Boche | 02581-P0316A | 8313 |
| 24126 | 7590 02/06/2006 | | EXAM | INER |
| | STEWARD JOHNST | MATHEW, FENN C | | |
| , | D, CT 06905-5619 | | ART UNIT | PAPER NUMBER |
| | , | | 3764 | |

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | • |
|---|--|---|----|
| | 09/625,792 | BOCHE, HARTMUT | |
| Office Action Summary | Examiner | Art Unit | |
| | Fenn C. Mathew | 3764 | |
| The MAILING DATE of this communication a Period for Reply | appears on the cover sheet w | ith the correspondence address | • |
| A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perion. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNION 1.136(a). In no event, however, may a rood will apply and will expire SIX (6) MON tute, cause the application to become Africa. | CATION. reply be timely filed ITHS from the mailing date of this communical BANDONED (35 U.S.C. § 133). | |
| Status | | | |
| 1) Responsive to communication(s) filed on 21 | November 2005. | · | |
| 2a)⊠ This action is FINAL . 2b)□ TI | his action is non-final. | | |
| 3) Since this application is in condition for allow | vance except for formal matt | ters, prosecution as to the merits | is |
| closed in accordance with the practice unde | r <i>Ex par</i> te Quayle, 1935 C.D |). 11, 453 O.G. 213. | |
| Disposition of Claims | | | |
| 4) Claim(s) 1,4,5,7-15 and 17-21 is/are pending | g in the application. | | |
| 4a) Of the above claim(s) 7,10 and 15 is/are | withdrawn from consideration | on. | |
| 5) Claim(s) is/are allowed. | | | |
| 6)⊠ Claim(s) <u>1,4,5,8,9,11-14 and 17-21</u> is/are re | jected. | | |
| 7) Claim(s) is/are objected to. | | | |
| 8) Claim(s) are subject to restriction and | d/or election requirement. | | |
| Application Papers | | | |
| 9) ☐ The specification is objected to by the Exami | iner. | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ a | ccepted or b) Objected to | by the Examiner. | |
| Applicant may not request that any objection to the | he drawing(s) be held in abeyar | nce. See 37 CFR 1.85(a). | |
| Replacement drawing sheet(s) including the corn | | | |
| 11) ☐ The oath or declaration is objected to by the | Examiner. Note the attached | d Office Action of form P1O-152. | • |
| Priority under 35 U.S.C. § 119 | | | |
| 12) ☐ Acknowledgment is made of a claim for forei a) ☐ All b) ☐ Some * c) ☐ None of: | gn priority under 35 U.S.C. § | § 119(a)-(d) or (f). | |
| Certified copies of the priority docume | ents have been received. | | |
| Certified copies of the priority docume | | | |
| 3. Copies of the certified copies of the pr | | received in this National Stage | |
| application from the International Bure | | | |
| * See the attached detailed Office action for a li | ist of the certified copies not | received. | |
| | | | |
| Attachment(s) | | O (DTO 440) | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(| Summary (PTO-413) s)/Mail Date | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/N Paper No(s)/Mail Date | 08) 5) Notice of I 6) Other: | nformal Patent Application (PTO-152) | |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 18-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not explicitly disclose the top of the recess having a length L_0 and a width B_0 where L_0 is greater than L_k and B_0 is greater than B_k .

Claim Rejections - 35 USC § 103

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 1, 5, 8-9, 11-12, and 14, 17 and 20 are rejected under 35
 U.S.C. 103(a) as being unpatentable over Mizuno et al. (4,274,423) in view of
 Corl et al. (5,715,827) and Hoek (6,312,380). Referring to claim 1, Mizuno
 discloses a medical instrument having an instrument body (10, 11), a recess in
 the instrument body (see notch in fig. 3) which comprises a collar forming an
 undercut (angled walls), the collar having an inside diameter (inherently), an
 embedding medium (see 21, 22 in fig. 3 and col. 5, lines 52- col. 6, line 4), a
 readable data carrier (14) embedded in the recess (see fig. 3), the data carrier
 being non-removably held in the undercut. Mizuno does not disclose the data
 carrier having outer dimensions smaller than the inside diameter. Corl et al.

teaches an analogous device including a recess wherein a data carrier is placed. Corl teaches the recess having a larger diameter than the outer dimensions of the data carrier for easier placement into the instrument body. Note that Corl also teaches in figures 7-8 that the collar has an inside diameter that is smaller than a length and width of the recess based on the sloping nature of the walls forming the recess. It would have been obvious to one of ordinary skill in the art at the time of invention to provide Mizuno with a data carrier with outer dimension smaller than the opening of the recess in an instrument body as taught by Corl for easier placement in the instrument body. Furthermore, Mizuno does not teach the data carrier is a wireless data carrier, however, Hoek teaches in col. 1, lines 26-44 that it is known in the medical instrument art that measures physiological characteristics, to make the device with a wireless data carrier in order to reduce costs and technical difficulties (size, structural integrity, sensor performance) that result from guide wires connected to sensors and small probes. Thus one having ordinary skill in the art would have known to make the data carrier of Mizuno a wireless data carrier in order to reduce the costs of the instrument and to overcome technical limitations of the wired data carrier.

4. Referring to claim 5, Mizuno discloses the instrument is made from stainless steel (col. 7, lines 1-2) and that the medium is made from silicone rubber (col. 6, lines 1-4). Mark's Standard Handbook for Mechanical Engineers states that the elasticity modulus of stainless steel is 27.6 msi (Table 5.1.3) and Mechanics of Materials states the elasticity modulus of stainless steel is 28-30 msi and for rubber is between 0.1 and 0.6 msi (Table H-2). As such Mizuno

Application/Control Number: 09/625,792

Art Unit: 3764

inherently discloses the embedded medium having an elasticity modulus smaller than the elasticity modulus of the instrument body. Referring to claim 8. Mark's Standard Handbook for Mechanical Engineers states that the heat conductivity for steel is 26.2 and for soft rubber is 0.08. thus Mizuno inherently teaches the heat conductivity of the embedded medium is smaller than that of the instrument. Referring to claim 9 Mizuno shows a spacer (13) arranged between the data carrier and the recess. Referring to claim 11, figure 3 of Mizuno shows a recess that comprises an opening (around 12) which forms a window on the outer surface of the body. Referring to claim 12, since the material around the recess is different from the outer surface of the instrument as shown in figure 3 of Mizuno, the recess is visually recognizable in the region of the outer surface. Referring to claim 14, Heosk teaches the desire to make the data carrier wireless. In addition Hoek teaches in col. 3, lines 55 – column 4, lines 20 that the data carrier includes a transmitter and receiver. Thus for reasons states above one having ordinary skill in the art would have known to include a transponder with an antenna. Referring to claims 17 and 20, the limitations are substantially similar in scope to the above claims. Note that the angled walls of the recess cause differing lengths and widths at different points of the recess, and that the data carrier is smaller than the recess. Referring to claim 20, note that encapsulation is taught which inherently results in a degree of shielding from mechanical or thermal load.

5. Claim 4 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno in view of Corl and Hoek as applied to claim 1 and 20

above, and further in view of Edwards (U.S. 5,456,682). Mizuno also teaches in col. 6, line 51 that the instrument is also made from a woven Dacron. Dacron is made from a polyethylene material. Mizuno also discloses the embedded medium is used to electrically isolate and to provide safety to the data carrier. However, Mizuno does not disclose an embedded medium other than silicone rubber. Edwards teaches in col. 7 lines 43-51 a potting compound to encapsulate and insulate a sensor of medical probe that includes loctite material. Loctite is a ceramic material with has a higher elasticity modulus than engineering polymers. Thus one having ordinary skill in the art would have known to substitute the silicone rubber encapsulated material for loctite-potting compound in order to isolate the data carrier of Mizuno. Therefore, the embedded medium would have a larger elasticity modulus than the instrument body in order to properly isolate the sensor electrically.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno in view of Corl and Hoek, as applied to claim 1 above, and further in view of Yunoki (4,686,964). Mizuno, as modified above discloses a wireless data carrier, however there is no discussion to surround the data carrier by a glass casing. Yunoki teaches in the abstract to surround sensors of a medical device with a casing in order to shield the sensor from external electromagnetic effects. Thus one having ordinary skill in the art would have known to surround a sensor with casing in order to shield the sensor from external magnetic effects. Additionally, it would have been obvious to one having ordinary skill in the art at the time of invention was made to select glass casing, since it has been held to

Application/Control Number: 09/625,792

Art Unit: 3764

be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use, and glass is a material used to shield against electromagnetic effects, and is suitable for the purpose as taught by Yunoki.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 4-5, 8-9, 11-14, and 17-21 have been considered but are moot in view of the new ground(s) of rejection.

Please note rejections above based on the newly cited Corl reference.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fenn C. Mathew whose telephone number is (571) 272-4978. The examiner can normally be reached on Monday - Friday 9:00am - 5:30pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fcm

January 31, 2006

MICHAEL A. BROWN PRIMARY EXAMINER

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